Preface

INTRODUCTION

This book is about professional communications for the Information Technology (IT) professional. According to one anonymous reviewer, “This manuscript covers the basic topics that are considered essential by most senior faculty members of technical-writing programs.” At the broad-brush stroke level, the book addresses four main topics: professional ethics, technical writing, presentation skills, and online writing. These topics are woven throughout the book and some of them are the main subjects of one or more chapters. This preface provides some commentary about each of these four key areas, describe the audience for the book, and follows this description with a more detailed look at the organization of the book. A short discussion about teaching from this book is included. This material is followed by sections on Suggestions and Corrections, an Author’s Note, and the Author’s Contact Information.

The overarching theme of this book is to provide well-tested, best-practice techniques and strategies in the four main topic areas while focusing on information that can be immediately applied to help the IT professional improve a particular skill. The author describes the generally accepted way of doing something and then illustrates that technique. The approach may seem a bit prescriptive to some readers, but this book is for IT professionals, not creative writers. If the author has succeeded in producing the book that was envisioned, then an individual will be able to turn to almost any page in the book, and find at least one tidbit of information that can be applied directly in the individual’s work. Also presented is the big picture relating to the chosen topics, so if a person reads the entire book, the person will have an excellent framework and foundation in the areas of professional ethics, technical writing, presentation skills, and online writing. In short, the learning outcomes of reading and understanding this book are as follows:

The reader will be able to

• Evaluate and come up with a good solution to an ethical problem
• Discuss and explain ethical issues with colleagues and others
• Develop an informed opinion about an ethical dilemma
• Use and apply many basic rules of technical writing
• Possess the writing skills to develop a technical paper
• Develop a well-thought out presentation
• Deliver a good presentation
• Understand the various forms of online communication
• Communicate effectively in a variety of online forums
• Conduct online research

This preface now continues by presenting some thoughts about the four main topics of the book. These topics define the scope of the book.

PROFESSIONAL ETHICS

Regarding ethics, IT professionals encounter many challenging ethical situations and without a proper framework for confronting, evaluating, and resolving ethical situations, the probability of obtaining the best or even a successful outcome is not high. One cannot merely rely on intuition for resolving ethical conflicts. A framework is needed so that ethical principles can be applied uniformly and consistently. Similar violations require similar consequences. Many IT professionals are not currently equipped to handle ethical conflicts. And, rather than merely attempting to deal with issues on an as needed basis when problems arise, one should be prepared in advance. Often ethical decisions must be made on the spot, and there is little time for the unprepared individual to research a situation that requires immediate attention. The book’s primary goal regarding ethics is to examine a well-developed ethical code and to work through a few scenarios applying this code of ethics. In other words, a practical hands-on approach to ethics is taken, also focusing on ethical issues relating to writing.

TECHNICAL WRITING

Another major topic is technical writing. If one talks to any employer, teacher, or scientist, one will likely hear complaints about the quality of their employees’, students’, and assistants’ writing, respectively. Even smart people with good language skills struggle with technical writing. This book presents components of a writing toolkit and provides examples of good writing. Also provided is material on manuscript preparation, as well as a wealth of tricks-of-the-trade-type material. Some of these items are strategies and methods that writers having years of experience take for granted, but those writers with less experience have difficulty acquiring and mastering. Learning these tricks and techniques can be made more efficient by gathering them together in one place. In addition to learning how to write particular snippets well, there is a chapter on writing an entire technical paper. And, since many IT professionals have difficulty in thoroughly documenting an event, there is a chapter on that topic. There are also insights into writing various professional communications, including a wealth of material on résumé writing, status reports, telephone messages, and the like. Many IT professionals claim that they suffer from writer’s block. The material on writing is of a practical nature and helps one to get started writing. Once this material is learned, IT professionals can immediately use this knowledge to improve their writing. For example, not all IT professionals know that it is considered poor style to begin a sentence with a symbol, such as “x is a real number,” rather than writing “The value x is a real number.” And, by the way, when should a punctuation symbol be pushed under closing double quotes … In addition, introduction to the LATEX-typesetting system is provided, the typesetting-system of choice for highly technical writing, as is done in computer science, Information Technology, and mathematics.
PRESENTATION SKILLS

Nearly all IT professionals must make presentations from time-to-time. If a person attends any conference on IT, the person will see that many presenters have room for significant improvement. Simply making a presentation once or twice a year is not sufficient practice for becoming an effective presenter. Usually presenters receive little critical feedback on their presentations, so improvements come quite slowly. People truly do not know how they come across or what they are doing wrong. Unlike traditional manuscripts, oral presentations allow a direct interaction with the audience. When delivered properly, they can be powerful and informative. An effective presentation can help secure a job or seal a deal with a client. On the other hand, a poorly executed presentation can keep an individual in the job-search market or lose the person a potential client. The book covers many important aspects of presentations, including analyzing an audience, using PowerPoint effectively, and handling questions. The book also provides information about making presentations effective and convincing. As in other parts of the book, the focus is on a practical approach. For example, “When preparing a survey talk, it is okay to omit things in order to save time or to narrow the focus of the talk.” Having developed a great presentation is merely the first hurdle though; one must be able to deliver the presentation effectively. This skill is also learned and needs to be developed, so there is a chapter on the delivery of a good IT presentation. Many of the ideas on presentations are common-sense suggestions, but if a person looks around, the person will find that many IT professionals do not follow these basic rules.

ONLINE WRITING

IT professionals often have to prepare information for an online forum. Writing for an online audience is a vastly different activity than writing for an offline audience, and being good at one form of writing, does not ensure that an individual will be effective at the other form. This book provides material about various online communication forums and presents a classification scheme for them. The popularity of blogging is tremendous and still growing. Therefore, the book contains a discussion and practical tips for bloggers. It describes how to outline, design, and manage a Web presentation. Prior to about 1995, few people conducted research online, but now, nearly everyone does; thus, a chapter about conducting online research is included. The book provides cautions about reliability of information and hints on how to follow-up online research with offline research, as well as information about how to cite online research. As throughout this book, the goal is to provide material that is of a practical ready-to-use nature.

WHO SHOULD READ THIS BOOK?

Anyone with an interest in professional ethics, technical writing, presentation skills, or online writing and possessing some background in one of the following fields can benefit from the use of the book:

- Biology
- Chemistry
- Computer engineering
- Computer science
This book will be useful for anyone who needs to deal with ethical issues, write up a technical project, give or develop a presentation, or write material for an online audience. The book focuses on practical information and process. The goal is to improve the reader’s ability and knowledge in each of these four areas.

ORGANIZATION OF THIS BOOK

Many of the chapters in this book are independent of the others and as a result, one does not need to read them in a linear fashion—one can pick and choose to focus on the particular topic of interest. In the next section of the preface we have more to say about the dependencies of the chapters when we describe how the book can be used for teaching a course. The book contains the following individual chapters, and below is a brief description of each of them:

- INTRODUCTION: This chapter sets the tone for the book and goes into more details about what we intend to cover. There are general sections on professional ethics, technical writing, presentation skills, and online writing.
- ETHICS FOR THE IT PROFESSIONAL: This chapter begins with a discussion of a standard code of ethics. The chapter then explores a number of ethical scenarios and applications of the code of ethics.
- PROFESSIONAL COMMUNICATIONS: Communication is a key part of most jobs. In this chapter we cover material about email, telephone, status reports, and so on. The chapter describes communication in a group setting and how to keep others informed. The chapter wraps up with notes on future trends and conclusions.
- ONLINE COMMUNICATION FORUMS: Here the author compares and contrasts ‘online’ versus ‘offline’ writing. The chapter provides a classification scheme for online writing. It provides general information about developing and maintaining a website.
- BLOGGING: The chapter begins with a review of the history of blogs and contains a list of interesting facts about blogs. The author provides a review of some popular free blogging software. Another section provides a few words of caution about blogs and a couple interesting blogging cases. This section is followed by one containing a listing of useful blogs for IT professionals.
- COMMENTS ON MANUSCRIPTION PREPARATION: This chapter provides material on how to prepare for a writing project, how to begin writing, and how to stay productive. This information is followed by more-technical aspects of writing, including tips for writing prose, style issues, and grammatical tips. Other technical writing tidbits are covered throughout the chapter.
• STRUCTURE OF A TECHNICAL PAPER: The author describes the process of writing a technical paper and goes over the basic sections that a typical paper contains. He presents material on the writing process and editing. In addition, the chapter includes thoughts about paper submission and follow-up. The chapter contains miscellaneous points and concluding remarks.

• ETHICAL ISSUES IN WRITING: The author presents material about the moral and social responsibilities of scientists. Given that most research involves collaborators, there is a section about obligations to coauthors. The chapter also describes issues relating to citing the work of others. The chapter contains information on copyright. The author discusses permission issues for figures and tables.

• DOCUMENTING AN EVENT: There are times when one must document an event, and this chapter focuses on how to do that appropriately. It also discusses writing up experiments, bug reports, and trip reports.

• FUNDAMENTALS AND DEVELOPMENT OF A PRESENTATION: This chapter covers many essential topics relating to presentations. From selecting a topic, to the setting for a presentation, to preparing the presentation, to presentation equipment, to supplemental materials, to talk advertisements, the reader will find many valuable presentation tips in this chapter.

• DELIVERING A (POWERPOINT) PRESENTATION AND MORE: This chapter focuses on issues relating to the effective delivery of a presentation. The author focuses on PowerPoint presentations. The chapter covers style issues, presentation genres, key slides to include, trouble spots, the effective handling of questions, how to avoid disasters, and methods for coping with nerves. Many useful tips are included.

• RÉSUMÉS: The author discusses many important topics relating to résumé development in this chapter. He provides insights into résumé writing and covers all the basic sections of a résumé. He also describes how to write a curriculum vitae. The chapter provides a final checklist for developing a résumé and include material on how to submit a résumé or vitae.

• INTRODUCTION TO LATEX: Many scientists consider LATEX to be the standard of typesetting systems. This chapter provides a thorough introduction to the LATEX-typesetting system. After reading this chapter, one will have the ability to typeset many different types of documents in LATEX. From installing LATEX on a computer, to creating a LATEX document, to creating one’s own environments in LATEX, this chapter covers most of the key introductory elements of LATEX.

Each chapter ends with a conclusions section that summarizes the information contained in the chapter, and when appropriate, it discusses future trends as well. References in this book are included at the end of each chapter. The book includes a comprehensive index for conveniently looking up terms or concepts.

In the next section, a number of ways that the book can be divided up and approached when used as a teaching tool are discussed. However, these reorganization and suggested divisions can also be used by individual readers depending on how they would like to approach the material based on their own experience and knowledge.
TEACHING FROM THIS BOOK

Although this book is intended to be used for self-study, it is entirely suitable to use in a college communications course, a technical writing course, or a course that has a significant component addressing one or more of the following topics: ethics, technical writing, presentations, or online writing. The book could also be used for an advanced high-school course that focuses on one of these topics. The teacher may want to supplement such a course with exercises that ask the student to practice and utilize the material being taught. Such exercises will be easy to generate, but not necessarily easy to grade.

This book is suitable for a course in technical communications. The instructor could cover the majority of topics contained in the book in a semester-long course, omitting topics of less interest depending on the time constraints. Most of the chapters are independent. However, it is best to cover chapter 1 first. Chapter 2 is best covered before chapter 8, and chapter 10 before chapter 11, but otherwise, the chapters can pretty much be covered in the desired order.

This book could be used for a course in ethics. The material in chapters 1, 2, 3, 4, 5, and 8 would be suitable. Chapter 1 contains a discussion of an approach to ethics. Chapter 2 covers ethics for the IT professional, including a discussion of a standard ethical code, ethical scenarios, and case studies of how to apply the ethics code. The focus of chapter 3 is professional communications, and sprinkled throughout that chapter, ethical remarks have been incorporated. Chapter 4 presents online-communication forums, and there are often ethical issues that arise in such groups. The material presented there on developing and maintaining a website could be skipped. Blogging is the subject of chapter 5, and the sections on the history of blogs and cautions about blogging would be appropriate for an ethics course. Chapter 8 contains a discussion on ethical issues in writing. The references provide a wealth of additional topics that could be used to supplement the text.

In a one-semester undergraduate or graduate course in technical writing, the majority of material in the book could be covered. If the course has little emphasis on ethics, chapter 2 could be omitted. If there is little emphasis with online writing, chapters 4 and 5 could be omitted. Chapter 12 on résumé writing could be omitted if time does not permit. A course that focuses heavily on presentations should include chapters 10 and 11, but one that does not can omit these or just cover a portion of them. The amount of material that an instructor can cover will be related to the depth with which the topics are covered. If regular lengthy writing assignments are given, perhaps it will be impossible to cover all the material in the book. On the other hand, if the assignments are kept shorter, more reading from both the text and references can be assigned.

Another approach would be to divide the material by topic. In this case one could divide the material into four or five parts: technical writing, ethics, presentations, going online, and miscellaneous. These could be covered in any desired order subject to the constraints already given. The technical writing part would consist of chapters 3, 6, 7, and 9; the ethics parts would consist of chapters 2 and 8; the presentations part would consist of chapters 10 and 11; the going online part would consist of chapters 4, 5, and 9; and the miscellaneous part would consist of the remaining chapters.

This book can be used to supplement the text or instructor’s notes for any course that has an ethical, writing, or presentation component.
AUTHOR’S NOTE

It is my sincere hope that an individual will experience the power of technical communications in the person’s chosen field and can use this book to help improve personal communications. Good luck, and above all, enjoy!

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